comprising code word phase measurements μ_i for a satellite at a time t_R, where $\mu_i = \gamma_i / T_i^c$, and γ_i being defined as time elapsed to time t_R from the beginning of a code word in the signal from satellite i in which t_R falls, T_i^c being defined as the code period for satellite i at time t_R in the signal received from satellite i, said code word phase measurements being simultaneously derived from the signals transmitted from said plurality of satellites and received at the object to be tracked;

transmitting said data to a central station; and

calculating at said central station the location of said object to be tracked based upon the transmitted data and data derived from at least one receiver apart from said object to be tracked receiving said signals from said plurality of satellites.

4.(twice amended) A method for identifying location of an object to be tracked, comprising:

measuring data related to propagation time differences between signals transmitted from a plurality of GPS satellites and received at said object to be tracked, said data comprising bit phase measurements μ_i for a satellite i at a time t_R, where $\mu_i = \beta_i / T_i^B$, β_i being the receiver bit-time offset for satellite i and defined as time elapsed to time t_R from the beginning of a [code word] bit in the signal from satellite i in which t_R falls, T_i^B being defined as the bit period for satellite i at time t_R in the signal received from satellite i, said bit phase measurements being simultaneously derived from the signals transmitted from said plurality of satellites and received at the object to be tracked;

transmitting said data to a central station; and

calculating at said central station the location of said object to be tracked based upon the transmitted data and data derived from at least one receiver apart from said object to be tracked receiving said signals from said plurality of satellites.

18.(twice amended) A [method] system for identifying location of an object to be tracked comprising:

means for measuring data related to propagation time differences between signals transmitted from a plurality of GPS satellites and received at said object to be tracked, each of said signals identifying an associated satellite, said object to be tracked [includes]including:

receiver means for receiving signals from at least four GPS satellites; and

first processor means for calculating a receiver bit phase for each of said satellites[, and], said bit phase for any satellite i at a time t_R being defined as β_i / T_i^B, β_i

being the [receiver] received bit-time offset for satellite i and defined as time elapsed to time t_R from the beginning of a [code word] bit in the signal from satellite i in which t_R falls, and T_i^B being defined as the bit period for satellite i at time t_R in the signal received from satellite i;

receiver means apart from said object for receiving said signals from said plurality of satellites;

a central station; and

transmission means for transmitting the calculated bit phases to said central station;

said system further including:

second processor means at said central station for determining signal propagation times between said plurality of satellites and said object and for determining location of said object based upon the bit phases transmitted by said transmission means and data derived from said receiver means apart from said object.

19.(amended) A system for identifying location of an object to be tracked, comprising:

means for measuring data related to propagation time differences between signals transmitted from a plurality of GPS satellites and received at said object to be tracked, each of said signals identifying an associated satellite, said object to be tracked including:

receiver means for receiving signals from at least four GPS satellites, and

first processor means for calculating a bit-time offset for each of said satellites and for determining a bit period for each signal received from said satellites, said bit-time offset for a satellite i being defined as time elapsed to a time t_R from the beginning of a [code word] bit in the signal from satellite i in which t_R falls, said bit period for satellite i being determined at time t_R in the signal from satellite i;

receiver means apart from said object for receiving said signals from said plurality of satellites;

a central station; and

transmission means for transmitting time stamps, the calculated bit-time offsets and bit periods, and satellite identification data, to said central station;

said system further including:

second processor means at said central station for determining signal propagation times between said plurality of satellites and said object and for determining location of said object based upon the bit-time offsets and periods, time stamps, satellite